



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 3800066.00086/205E	Application No. 10/717,500
		Applicant Chappell <i>et al.</i>	
		Filing Date November 21, 2003	Group Art Unit 1638

(37 CFR §1.98(b))

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	2003/0166255	09/04/03	Chappell	435	252.3	03/08/02
	AB	2006/0218661	09/28/06	Chappell et al.	800	278	07/26/04
	AC	2007/0089198	04/19/07	Chappell et al.	800	280	12/14/06
	AD	2007/0231861	10/04/07	Millis et al.	435	69.1	05/24/07
	AE	2007/0238157	10/11/07	Millis et al.	435	166	05/24/07
	AF	2007/0238159	10/11/07	Millis et al.	435	252.33	05/24/07
	AG	2007/0238160	10/11/07	Millis et al.	435	252.33	05/24/07
	AH	2008/0171378	07/17/08	Keasling	435	254.21	07/21/05
	AI	2008/0178354	07/24/08	Chappell et al.	800	298	10/31/07
	AJ	2010/0035329	02/11/10	Millis et al.	435	254.2	07/27/09
	AK	2010/0120110	05/13/10	Chappell	435	166	07/29/08
	AL	2010/0129306	05/27/10	Julien et al.	424	65	10/14/09
	AM	2010/0151519	06/17/10	Julien et al.	435	69.1	08/12/09
	AN	2010/0151555	06/17/10	Julien et al.	435	193	08/12/09
	AO	2010/0216186	08/26/10	Chappell et al.	435	69.1	10/28/08
	AP	5,589,619	12/31/96	Chappell et al.	800	205	12/08/94
	AQ	5,766,911	06/16/98	Koike et al.	435	193	09/28/95
	AR	5,824,774	10/20/98	Chappell et al.	530	350	04/12/96
	AS	5,871,988	02/16/99	Croteau et al.	435	183	04/29/97
	AT	5,981,843	11/09/99	Chappell et al.	800	301	05/18/95
	AU	6,072,045	06/06/00	Chappell et al.	536	23.1	08/14/98
	AV	6,100,451	08/08/00	Chappell et al.	800	298	12/22/95
	AW	6,468,772	10/22/02	Chappell et al.	435	183	09/17/99
	AX	6,495,354	12/17/02	Chappell et al.	435	183	06/22/01
	AZ	6,559,297	05/06/03	Chappell et al.	536	23.1	06/29/01
	BA	6,569,656	05/27/03	Chappell et al.	435	183	07/11/01
	BB	6,645,762	11/11/03	Chappell et al.	435	325	07/06/01
	BC	6,890,752	05/10/05	Chappell et al.	435	325	06/28/01
	BD	7,186,891	03/06/07	Chappell et al.	800	298	02/28/00

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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) List of Patents and Publications for Applicant's Information Disclosure Statement (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 3800066.00086/205E	Application No. 10/717,500
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	BE	7,405,057	07/29/08	Chappell et al.	435	69.1	03/08/02
	BF	7,442,785	10/28/08	Chappell et al.	536	23.6	07/26/04

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Translation	
					Yes	No
	BG	0 768 381	04/16/97	EP		
	BH	WQ 96/36697	11/21/96	WIPO		
	BI	WO 97/38571	10/23/97	WIPO		
	BJ	WO 97/38703	10/23/97	WIPO		
	BK	WO 00/017327	03/30/00	WIPO		
	BL	WO 2002/072758	09/19/02	WIPO		
	BM	WO 2004/031376	04/15/04	WIPO		
	BN	WO 2006/079020	07/27/06	WIPO		
	BO	WC 2010/019696	02/18/10	WIPO		

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	BP	An et al., "Functional analysis of the 3' control region of the potato wound-inducible proteinase inhibitor II gene," <i>Plant Cell</i> 1:115-122 (1989).
	BQ	An et al., "Organ-specific and developmental regulation of the nopaline synthase promoter in transgenic tobacco plants," <i>Plant Physiol.</i> 88:547-552 (1988).
	BR	Anderson et al., "Farnesyl diphosphate synthetase - molecular cloning sequence, and expression of an essential gene from <i>Saccharomyces cerevisiae</i> ," <i>J. Biol. Chem.</i> 264(32):19176-19184 (1989).
	BS	ATCC Accession No. CCL 61™, derived from CHO-K1 cell line, Depositor: Puck, T., Isolation date: 1957, Retrieved from the Internet: <URL: atcc.org/ATCCAdvancedCatalogSearch/ProductDetails/tabid/452/Default.aspx , (accessed 4/7/10; 4 pages).
	BT	ATCC Accession No. CRL 1650™, derived from CV-1 cell line, Cell type: SV40 transformed, Depositor: Gluzman, Y., Retrieved from the Internet: <URL: atcc.org/ATCCAdvancedCatalogSearch/ProductDetails/tabid/452/Default.aspx , (accessed 4/7/10; 3 pages).
	BU	Back, K. and J. Chappell, "Identifying functional domains within terpene cyclases using a domain-swapping strategy," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 93:6841-6845 (1996).
	BV	Bio-Rad Technical Bulletin #1687, "Biolistic Particle Delivery Systems," Bio-Rad Laboratories, Hercules, California, pp. 1-11 (February 9, 1996).
	BW	Böhlmann et al., "Terpenoid-based defenses in conifers: cDNA cloning, characterization, and functional expression of wound-inducible (E)- α -bisabolene synthase from grand fir (<i>Abies grandis</i>)," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95:6756-6761 (1993).

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	BX	Bustos et al., "Regulation of β -glucuronidase expression in transgenic tobacco plants by an A/T-rich, <i>cis</i> -acting sequence found upstream of a French bean β -phaseolin gene," <i>Plant Cell</i> 1:839-853 (1989).			
	BY	Callis et al., "Heat inducible expression of a chimeric maize hsp70CAT gene in maize protoplasts," <i>Plant Physiol.</i> 88:965-968 (1988).			
	BZ	Callis et al., "Introns increase gene expression in cultured maize cells," <i>Genes Dev.</i> 1:1183-1200 (1987).			
	CA	Cane et al., "Aristolochene biosynthesis and enzymatic cyclization of farnesyl pyrophosphate," <i>J. Am. Chem. Soc.</i> 111:8914-8916 (1989).			
	CB	Cane et al., "Overexpression in <i>Escherichia coli</i> of soluble aristolochene synthase from <i>Penicillium roqueforti</i> ," <i>Arch. Biochem. Biophys.</i> 302:415-419 (1993).			
	CC	Cane et al., "Trichodiene biosynthesis and the stereochemistry of the enzymatic cyclization of farnesyl pyrophosphate," <i>Bioorg. Chem.</i> 13:246-265 (1985).			
	CD	Cane et al., "Trichodiene synthase. Identification of active site residues by site-directed mutagenesis," <i>Biochem.</i> 34:2480-2488 (1995).			
	CE	Cane et al., "Trichodiene synthase. Substrate specificity and inhibition," <i>Biochem.</i> 34:2471-2479 (1995).			
	CF	Cane, D., "Enzymatic formation of sesquiterpenes," <i>Chem. Rev.</i> 90:1089-1103 (1990).			
	CG	Chappell, J. and R. Nable, "Induction of sesquiterpenoid biosynthesis in tobacco cell suspension cultures by fungal elicitor," <i>Plant Physiol.</i> 85:469-473 (1987).			
	CH	Chappell et al., "Elicitor-inducible 3-hydroxy-3-methylglutaryl coenzyme A reductase activity is required for sesquiterpene accumulation in tobacco cell suspension cultures," <i>Plant Physiol.</i> 97:693-698 (1991).			
	CI	Corey et al., "Isolation of an <i>Arabidopsis thaliana</i> gene encoding cycloartenol synthase by functional expression in a yeast mutant lacking lanosterol synthase by the use of a chromatographic screen," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 90:11628-11632 (1993).			
	CJ	Croteau et al., "Irreversible inactivation of monoterpene cyclases by a mechanism-based inhibitor," <i>Arch. Biochem. Biophys.</i> 307(2):397-404 (1993).			
	CK	Croteau, R., "Evidence for the ionization steps in monoterpene cyclization reactions using 2-fluorogeranyl and 2-fluorolinalyl pyrophosphates as substrates," <i>Arch. Biochem. Biophys.</i> 251(2):777-782 (1986).			
	CL	Degenhardt et al., "Monoterpene and sesquiterpene synthases and the origin of terpene skeletal biodiversity in plants," <i>Phytochem.</i> 70:1621-1637 (2009).			
	CM	Dekeyser et al., "Transient gene expression in intact and organized rice tissues," <i>Plant Cell</i> 2:591-602 (1990).			
	CN	Draper et al., "Ti plasmid homologous sequences present in tissues from <i>Agrobacterium</i> plasmid-transformed <i>Peunia</i> protoplasts," <i>Plant Cell Physiol.</i> 23(3):451-458 (1982).			
	CO	Fang et al., "Multiple <i>cis</i> regulatory elements for maximal expression of the cauliflower mosaic virus 35S promoter in transgenic plants," <i>Plant Cell</i> 1:141-150 (1989).			
	CP	Freeman et al., "A comparison of methods for plasmid delivery into plant protoplasts," <i>Plant Cell Physiol.</i> 25(8):1353-1365 (1984).			
	CQ	Fromm et al., "An octopine synthase enhancer element directs tissue-specific expression and binds ASF-1, a factor from tobacco nuclear extracts," <i>Plant Cell</i> 1:977-984 (1989).			
	CR	Fromm et al., "Stable transformation of maize after gene transfer by electroporation," <i>Nature</i> 319:791-793 (1986).			
	CS	Garel, J., "Folding of Large Proteins: Multidomain and Multisubunit Proteins," in "Protein Folding," Creighton, ed., W.H. Freeman & Co., New York, pp. 406-407 (1992).			
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	CT	Gasser, C. and R. Fraley, "Genetically engineering plants for crop improvement," Science 244:1293-1299 (1989).		
	CU	Gershenzon, J. and R. Croteau, in "Lipid Metabolism in Plants," Moore, T., ed., CRC Press, Boca Raton, Florida: CRC Press, pp. 340-388 (1993).		
	CV	Goeddel et al., "Synthesis of human fibroblast interferon by <i>E. coli</i> ," Nucleic Acids Res. 8(18):4057-4074 (1980).		
	CW	Gordon-Kamm et al., "Transformation of maize cells and regeneration of fertile transgenic plants," Plant Cell 2:603-618 (1990).		
	CX	Hanley, K. and J. Chappell, "Solubilization, partial purification, and immunodetection of squalene synthetase from tobacco cell suspension cultures," Plant Physiol. 98:215-220 (1992).		
	CY	Horsch et al., "A simple and general method for transferring genes into plants," Science 227:1229-1231 (1985).		
	CZ	Jang, J. and J. Sheen, "Sugar sensing in higher plants," Plant Cell 6:1665-1679 (1994).		
	DA	Kay et al., "Duplication of CaMV 35S promoter sequences creates a strong enhancer for plant genes," Science 236:1299-1302 (1987).		
	DB	Kindle, K., "High-frequency nuclear transformation of <i>Chlamydomonas reinhardtii</i> ," Proc. Natl. Acad. Sci. U.S.A. 87:1228-1232 (1990).		
	DC	Kuhlemeier et al., "The pea <i>rbcS-3A</i> promoter mediates light responsiveness but not organ specificity," Plant Cell 1:471-478 (1989).		
	DD	Laskovics, F. and C. Poulter, "Prenyltransferase: determination of the binding mechanism and individual kinetic constants for farnesylpyrophosphate synthetase by rapid quench and isotope partitioning experiments," Biochem. 20:1893-1901 (1981).		
	DE	Lichtenstein, C. and S. Fuller, "Vectors for the genetic engineering of plants," in <i>Genetic Engineering</i> , vol. 6, Rigby P, ed., London, Academic Press, pp.103-183 (1987).		
	DF	Lichtenstein, C. and J. Draper, "Genetic engineering of plants," in <i>DNA Cloning: A Practical Approach</i> , Vol. 2, pp.67-119. Edited by D. Glover., Oxford & Washington D.C.: IRL Press (1985).		
	DG	Marcotte et al., "Abscise acid-responsive sequences from the Em gene of wheat," Plant Cell 1:969-976 (1989).		
	DH	Mau, C. and C. West, "Cloning of casbene synthase cDNA: evidence for conserved structural features among terpenoid cyclases in plants," Proc. Natl. Acad. Sci. U.S.A. 91:8497-8501 (1994).		
	DI	Noel, J. and M. Tsai, "Phospholipase A ₂ engineering: design, synthesis, and expression of a gene for bovine (pro)phospholipase A ₂ ," J. Cell. Biochem. 40:309-320 (1989).		
	DJ	Odell et al., "Identification of DNA sequences required for activity of the cauliflower mosaic virus 25S promoter," Nature 313:810-812 (1985).		
	DK	Ohnuma et al., "A role of the amino acid residue located on the fifth position before the first aspartate-rich motif of farnesyl diphosphate synthase of determination of the final product," J. Biol. Chem. 271(48):30748-30754 (1996).		
	DL	Ow et al., "Functional regions of the cauliflower mosaic virus 35S RNA promoter determined by use of the firefly luciferase gene as a reporter of promoter activity," Proc. Natl. Acad. Sci. U.S.A. 84:4870-4874 (1987).		
	DM	Potrykus, I., "Gene transfer to plants: assessment of published approaches and results," Annu. Rev. Plant Physiol. Plant Mol. Biol. 42:205-225 (1991).		
	DN	Pyun et al., "Regiospecificity and isotope effects associated with the methyl-methylene elimination in the enzyme-catalyzed biosynthesis of (R)- and (S)-limonene," J. Org. Chem. 58:3998-4009 (1993).		

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	DO	Rajaonarivony et al., "Characterization and mechanism of (4S)-limonene synthase, a monoterpene cyclase from the glandular trichomes of peppermint (<i>Mentha x piperita</i>)," Arch. Biochem. Biophys. 296(1):49-57 (1992).			
	DP	Rajaonarivony et al., "Evidence for an essential histidine residue in 4S-limonene synthase and other terpene cyclases," Arch. Biochem. Biophys. 299(1):77-82 (1992).			
	DQ	Rosahl et al., "Expression of a tuber-specific storage protein in transgenic tobacco plants: demonstration of an esterase activity," EMBO J. 6(5):1155-1159 (1987).			
	DR	Schäffner, A. and J. Sheen, "Maize <i>rbcS</i> promoter activity depends on sequence elements not found in dicot <i>rbcS</i> promoters," Plant Cell 3:997-1012 (1991).			
	DS	Schalk, M. and R. Croteau, "A single amino acid substitution (F363I) converts the regiochemistry of the spearmint (-)-limonene hydroxylase from a C6- to a C3-hydroxylase," Proc. Natl. Acad. Sci. U.S.A. 97(22):11948-11953 (2000).			
	DT	Schernthaner et al., "Endosperm-specific activity of a zein gene promoter in transgenic tobacco plants," EMBO J. 7(5):1249-1255 (1988).			
	DU	Sheen et al., "Green-fluorescent protein as a new vital marker in plant cells," Plant J. 8(5):777-784 (1995).			
	DV	Sheen, J., "Metabolic repression of transcription in higher plants," Plant Cell 2:1027-1038 (1990).			
	DW	Shen, Q. and T. Ho, "Functional dissection of an abscisic acid (ABA)-inducible gene reveals two independent ABA-responsive complexes each containing a G-box and a novel <i>cis</i> -acting element," Plant Cell 7:295-307 (1995).			
	DX	Shimatake, H. and M. Rosenberg, "Purified λ regulatory protein cII positively activates promoters for lysogenic development," Nature 292:128-132 (1981).			
	DY	Siebert et al., " <i>cis</i> -Analysis of the wound-inducible promoter <i>wun1</i> in transgenic tobacco plants and histochemical localization of its expression," Plant Cell 1:961-968 (1989).			
	DZ	Simpson et al., "Light-inducible and tissue-specific expression of a chimaeric gene under control of the 5'-flanking sequence of a pea chlorophyll <i>a/b</i> -binding protein gene," EMBO J. 4(11):2723-2729 (1985).			
	EA	Song, L. and C. Poulter, "Yeast farnesyl-diphosphate synthase: site-directed mutagenesis of residues in highly conserved prenyl-transferase domains I and II," Proc. Natl. Acad. Sci. U.S.A. 91:3044-3048 (1994).			
	EB	Stoessel et al., "Sesquiterpenoid stress compounds of the solanaceae," Phytochem. 15:855-872 (1976).			
	EC	Straub et al., "Structure and promoter analysis of an ABA- and stress-regulated barley gene, HVA1," Plant Mol. Biol. 6:617-630 (1994).			
	ED	Takahashi, T. and Y. Komeda, "Characterization of two genes encoding small heat-shock proteins in <i>Arabidopsis thaliana</i> ," Mol. Gen. Genet. 219:365-372 (1989).			
	EE	Takahashi et al., "Isolation and analysis of the expression of two genes from the 81-kilodalton heat-shock proteins from <i>Arabidopsis</i> ," Plant Physiol. 99:383-390 (1992).			
	EF	Tarshis et al., "Regulation of product chain length by isoprenyl diphosphate synthases," Proc. Natl. Acad. Sci. U.S.A. 93:15018-15023 (1996).			
	EG	Terada, R. and K. Shimamoto, "Expression of CaMV35S-GUS gene in transgenic rice plants," Mol. Gen. Genet. 220:389-392 (1990).			
	EH	Thornburg et al., "Wound-inducible expression of a potato inhibitor II-chloramphenicol acetyltransferase gene fusion in transgenic tobacco plants," Proc. Natl. Acad. Sci. U.S.A. 84:744-748 (1987).			

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	EI	Vögeli, U. and J. Chappell, "Induction of sesquiterpene cyclase and suppression of squalene synthetase activities in plant cell cultures treated with fungal elicitor," <i>Plant Physiol.</i> 88:1291-1296 (1988).		
	EJ	Vögeli, U. and J. Chappell, "Inhibition of a plant sesquiterpene cyclase by mevinolin," <i>Arch. Biochem. Biophys.</i> 288(1):157-162 (1991).		
	EK	Vögeli, U. and J. Chappell, "Regulation of a sesquiterpene cyclase in cellulase-treated tobacco cell suspension cultures," <i>Plant Physiol.</i> 94:1860-1866 (1990).		
	EL	Vögeli et al., "Inhibition of phytoalexin biosynthesis in elicitor-treated tobacco cell-suspension cultures by calcium/calmodulin antagonists," <i>Plant Physiol.</i> 100:1369-1376 (1992).		
	EM	Weichselbraun et al., "Definition of the human immunodeficiency virus type 1 Rev and human T-cell leukemia virus type I Rex protein activation domain by functional exchange," <i>J. Virol.</i> 66(4):2583-2587 (1992).		
	EN	Wheeler, C. and R. Croteau, "Direct demonstration of the isomerization component of the monoterpene cyclase reaction using a cyclopropylcarbinyl pyrophosphate substrate analog," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 84:4856-4859 (1987).		
	EO	Whitehead et al., "5-epi-Aristolochene is a common precursor of the sesquiterpene phytoalexins capsidiol and debneyol," <i>Phytochemistry</i> 28(3):775-779 (1989).		
	EP	Whitehead et al., "Synthesis of (+)-5-epi-aristolochene and (+)-1-deoxycapsidiol from capsidiol," <i>Phytochemistry</i> 29(2):479-482 (1990).		
	EQ	Wildung, M. and R. Croteau, "A cDNA clone for taxadiene synthase, the diterpene cyclase that catalyzes the committed step of taxol biosynthesis," <i>J. Biol. Chem.</i> 271(16):9201-9204 (1996).		
	ER	Wong et al., "Domain exchange: characterization of a chimeric lipase of hepatic lipase and lipoprotein lipase," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 88:11290-11294 (1991).		
	ES	Zhang, W. and R. Wu, "Efficient regeneration of transgenic plants from rice protoplasts and correctly regulated expression of the foreign gene in the plants," <i>Theor. Appl. Genet.</i> 76:835-840 (1988).		
	ET	Zook et al., "Characterization of novel sesquiterpene biosynthesis in tobacco expressing fungal sesquiterpenoid synthase," <i>Plant Physiol.</i> 112:311-318 (1996).		

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					Yes	No
None.						

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	1	Office Action, issued July 30, 2003, in connection with U.S. Patent Application Serial No. 09/514,513 (Attorney Docket No. 3800066.00084/205C).
	2	Office Action, issued February 10, 2005, in connection with U.S. Patent Application Serial No. 09/514,513 (Attorney Docket No. 3800066.00084/205C).
	3	Office Action, issued February 9, 2006, in connection with U.S. Patent Application Serial No. 09/514,513 (Attorney Docket No. 3800066.00084/205C).
	4	Office Action, issued August 6, 2002, in connection with U.S. Patent Application Serial No. 09/576,057 (Attorney Docket No. 3800066.00085/205D).
	5	Office Action, issued February 27, 2003, in connection with U.S. Patent Application Serial No. 09/576,057 (Attorney Docket No. 3800066.00085/205D).
	6	Office Action, issued January 8, 2009, in connection with U.S. Patent Application Serial No. 11/932,489 (Attorney Docket No. 3800066.00087/205F).
	7	Office Action, issued October 23, 2009, in connection with U.S. Patent Application Serial No. 11/932,489 (Attorney Docket No. 3800066.00087/205F).
	8	International Search Report, issued August 8, 1997, in connection with International Patent Application Serial No. PCT/US97/05986 (Attorney Docket No. 3800066.00089/205PC).
	9	Examiner's Report, issued July 21, 2003, in connection with Canadian Patent Application Serial No. 2,250,712 (Attorney Docket No. 3800066.00094/205CA).
	10	Copy of response to Examination Report, filed January 21, 2004, in connection with Canadian Patent Application Serial No. 2,250,712 (Attorney Docket No. 3800066.00094/205CA).
	11	Examiner's Report, issued December 10, 2004, in connection with Canadian Patent Application Serial No. 2,250,712 (Attorney Docket No. 3800066.00094/205CA).
	12	Copy of response to Examination Report, filed January 18, 2005, in connection with Canadian Patent Application Serial No. 2,250,712 (Attorney Docket No. 3800066.00094/205CA).
	13	Official Action, issued February 16, 2004, in connection with Czech Republic Patent Application Serial No. 1998-3179 (Attorney Docket No. 3800066.00096/205CZ).
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List of Patents and Publications for Applicant's Information Disclosure Statement (37 CFR §1.98(b))			Applicant Chappell <i>et al.</i>	
			Filing Date November 21, 2003	Group Art Unit 1638
Other Documents (include Author, Title, Date, and Place of Publication)				
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	18	Copy of response to Examination Report, filed October 12, 2000, in connection with European Patent Application Serial No. 97921142.2 (Attorney Docket No. 3800066.00111/205EP).		
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